

1 CHAIRPERSON JAMES: Mr. Sklansky.

2 MR. SKLANSKY: Thank you. I'd like to thank the
3 Commission for inviting me. As I think you know, my presentation
4 is only indirectly related to advertising and promotion. I
5 personally believe that most advertisements, casino
6 advertisements are not deceptive and that their description of
7 their liberal games are basically accurate. The problem is that
8 it --

9 CHAIRPERSON JAMES: Mr. Sklansky, can I ask you to
10 pull that microphone up a little closer.

11 MR. SKLANSKY: The problem is it does the casino
12 little good to bring in customers who will only optimally play
13 those games that they advertise. If everyone did only that, the
14 casinos would go broke. So in that one sense, you might say that
15 the advertisements would be considered not quite what they
16 appear. I agree that casinos do not rely on compulsive
17 gamblers. However to at least some extent, they rely on
18 mathematically ignorant gamblers and that's more what I want to
19 address right now.

20 Before one can determine the impact of gambling in
21 this country, I believe it is important to distinguish among the
22 various games. The fact is different games of chance contain
23 different aspects. To put it bluntly, some games are
24 significantly worse than others. I might be biased as a
25 semi-retired professional gambler. I am displeased with any game
26 that doesn't offer the opportunity to get an edge over the house.
27 However, even those games that don't can be categorized along a

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1 spectrum ranging from a very acceptable and enjoyable gamble to
2 frankly a rip-off.

3 In my opinion there are four factors that should be
4 considered when evaluating a game's position within the spectrum;
5 the house percentage, the degree of skill, if any, the expected
6 hourly loss and the amount of deception inherent in that game.
7 In a moment I will describe the various games with regard to
8 those factors but first, in general, clearly the larger the
9 percentage edge, the worse it is for the person playing that
10 game. For example, if a game has a five percent house edge, it
11 means that your expected loss at the end of your gambling session
12 will be five percent of the total amount of money you have bet.

13 Currently the house percentage varies from as much as
14 30 percent to as little as one-tenth of one percent. In fact,
15 there are some games where expert players can even have up to a
16 one percent advantage. As to skill, again, I may be biased
17 because it is only skillful games that give the professional
18 gambler the opportunity to make a living. Examples are poker,
19 poker machines, black jack and sports betting. Still in my
20 opinion games requiring a high degree of skill are not as open to
21 criticism. The fact that a game forces you to learn sound
22 reasoning skills and develop discipline cannot be discounted.

23 As far as hourly loss is concerned, percentage edge
24 by itself is not always the best way to evaluate a game. Games
25 that offer high odds deserve to have a higher edge. But another
26 aspect that can mitigate this high percentage is if the game is
27 played slowly, at least that game will not beat the player out of

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1 that much on an hourly basis. Keno and football bets are
2 examples.

3 The amount of deception inherent in a game;
4 regardless of the house edge, I believe one thing that should be
5 frowned upon are deceptive games. By that I mean games where the
6 edge is greater than it appears. This for instance is not the
7 case in the game of roulette. Clearly the edge comes from the
8 green zeros which are there for all to see and I have little
9 sympathy for those who choose not to see. But there is one
10 category of game that I believe is deceptive. I speak of some but
11 not all of the more modern gaming machines. An example would be
12 those machines that have some sort of wheel above them that
13 occasionally spin and reward the player varying amounts.

14 It is not generally known that this wheel is not
15 equally likely to stop in any position. The lower pays come up
16 much more frequently than the higher ones and nothing indicates
17 this is the case. There is a similar problem with the actual
18 reels of some slot machines and I will speak more on this
19 shortly. I want to state a few things before going into each
20 game in more detail. One is the games in Nevada are almost
21 always the most liberal in the country. So any criticism I may
22 have about any particular game would be that much stronger in
23 other parts of the country.

24 Secondly, I do not consider myself a consumer
25 advocate. Everyone must drive a car, so we need people like
26 Ralph Nader to make sure cars are safe and to speak out when they
27 are not. But no one is forced to gamble and certainly no one is
28 forced to gamble foolishly. There are plenty of opportunities to

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1 play games with minuscule house advantages and it is not that
2 difficult to learn which games those are and how to play them.
3 So I have little sympathy for those who choose not to educate
4 themselves enough to distinguish between the good games and the
5 bad. But the purpose of this testimony is simply to lay out the
6 facts.

7 On the other hand, while I have no sympathy for
8 gamblers too lazy to do the proper studying, the fact is that
9 casinos count on the ignorance of their customers. Actually, I
10 should say they count on the ignorance of some of their
11 customers. I can use the health club business as an analogy. It
12 is well known that health clubs can charge a reasonable yearly
13 membership because the vast majority of the members quickly lose
14 their discipline and don't show up.

15 The situation is similar for casinos. If everyone
16 placed only the lowest house percentage games and played
17 properly, casinos would have to close their doors or at least
18 offer a lot less amenities. An unforeseen benefit to these
19 hearings may be greater public awareness of the importance of
20 studying probability. While I am not an anti-gambling crusader,
21 I am a pro-probability crusader. Probability is a key component
22 in making good decisions and I don't just mean in the area of
23 gambling. It is a valuable tool in evaluating questions of
24 everyday life. Yet probability is normally studied only by
25 college math and science majors.

26 This is a shame because the subject is actually
27 rather simple and very important. If everyone fully understood
28 probability it would undoubtedly have a major impact on the

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1 gambling industry. Some gambling operators would go out of
2 business but that would be a small price to pay when compared to
3 the benefits the country would gain from the more educated
4 populations.

5 Now, the games in more detail. Roulette; bets on
6 roulette have a house advantage of about five percent. For
7 instance, if you bet on red, you will win if any of the 18 red
8 numbers show up and lose if any of the 18 black numbers or the
9 two green numbers show. On an average you will be down \$2.00
10 after a \$38.00 bets, two divided by 38 is five percent. There is
11 no skill in roulette. Some people think they can devise winning
12 systems but they are utterly wrong. Some casinos encourage this
13 thinking by posting an electronic board to show the past results
14 but this information is completely useless and casinos know it.
15 As far as hourly loss is concerned, it works out to a bit more
16 than one bet per hour if you bet one bet at a time.

17 Craps; that house edge depends on which bet you make.
18 The most common called the pass line bet is a 1.4 disadvantage to
19 the player but if you back that up with what is called a odds bet
20 this disadvantage can be substantially reduced. Casinos would
21 not be happy if their patrons stuck only to these bets. However,
22 there are many other bets on the crap layout with a far greater
23 house edge. For example, you can bet that the very next roll
24 will be a seven.

25 The true odds of rolling a seven are five to one
26 against you. The casino pays four to one. This results in a
27 16-2/3 percent house advantage and thus, is a terrible sucker
28 bet. Many of the other craps propositions are almost as bad and

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1 there is one completely disgraceful bet which I just found out is
2 not allowed in New Jersey but it's called the "Big Six" and "Big
3 Eight". The bet is that you bet that a six or an eight comes up
4 before a seven. What makes this bet really unacceptable is that
5 the exact same bet can be put on the way out and somewhere else
6 and you get seven to six odds.

7 In other words, there two different spots and one bet
8 pays higher odds than the other. That's the "Big Six" and "Big
9 Eight" bets only attract the complete novice gambler who isn't
10 aware that the exact same bet with better odds is elsewhere.
11 Though it is a traditional part of the craps layout, I would
12 highly recommend that that bet be eliminated.

13 The "Big Six Wheel"; this is a terrible game. More
14 than any other it takes advantage of total beginners. Most
15 casinos have one or two "Big Six Wheels" not to be confused with
16 the "Big Six" bet on the crap table, situated near their entrance
17 and they are obviously targeting the beginner. The fact is no
18 one but a novice would play this game. The odds are horrible and
19 self-evident. Every bet has a disadvantage well over 10 percent
20 and it would be a simple matter to adjust the wheel so that the
21 house edge is reasonable.

22 Black jack; some people actually beat black jack.
23 Expert players have a small edge against the casinos. That edge
24 is enough to make a living at the game. There are those who do,
25 in fact, do that until they are caught that is. The vast
26 majority of people have a disadvantage when they play 21.
27 Depending on their skill level that disadvantage is usually
28 between one percent and four percent. To go beyond this requires

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1 some study. By memorizing a computer derived basic strategy, you
2 reduce your disadvantage to about a half of a percent. It should
3 take only a few days to attain this level of expertise and if you
4 want to take it further you can learn how to quote "count" cards.

5 This is not hard. If you spend a couple of weeks
6 learning and practicing, you will have an edge over the casino.
7 On the other hand, casinos should not really be commended for
8 offering this game. For one thing, when it was first offered,
9 they were not aware of the possibility of beating it. They were
10 taken by surprised when Edward Thorpe first demonstrated that
11 fact in 1962. Ironically, after an initial period of paranoia
12 they realized the publicity surrounding the beatibility of the
13 game helped more than it hurt. The fact is that they do bar
14 counters however, and if they didn't, they would get destroyed.
15 I'm going to have to speed up a little bit here.

16 Keno. Oh, I do want to say one other thing though.
17 It is illustrative to note that while casinos are happy to
18 provide you with the past winning numbers in roulette or in
19 baccarat so you can devise a scheme based on those numbers, they
20 would never provide you with help as to what cards have been
21 played previously in black jack because you could beat them.

22 Keno, your expected loss is 30 cents for every dollar
23 bet. That's a terrible disadvantage but it's not quite as bad as
24 it seems because on bets that pay very, very high odds it really
25 isn't that horrible. There is one bet on the keno board though
26 that really is terrible. It's called the one spot and you get
27 two to one odds on a three to one shot and it just is really
28 terrible, they should eliminate it.

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1 However, keno doesn't have that much of an hourly
2 loss involved. If you play \$1.00 tickets, you're going to lose
3 about \$3.00 an hour. So that's another reason why I'm really not
4 that opposed to keno. The lottery is similar to keno. You have
5 a 50 percent disadvantage and the hourly rate doesn't really
6 apply. And in fact, there is some skill to the lottery, namely
7 betting combinations that are less likely to tie with other
8 people but I won't go into that here.

9 Poker; I say please leave this game alone.
10 Unquestionably poker has the most positive aspects to it of any
11 gambling game. It is a game of skill. There is a short term
12 luck factor which allows weaker players to beat those more
13 skilled but in the long run those who are talented, dedicated and
14 disciplined will win the money. Thus, there is a major incentive
15 for those who like to play poker to improve their game. Getting
16 good at poker requires learning things which I believe will also
17 help you in other areas of your life. Reading people, analyzing
18 risks versus rewards, calculating probabilities and developing
19 willpower under adversity are just a few of those attributes. In
20 poker, the house does not make its money from loses. It charges
21 a reasonable rate for rent.

22 Poker machines; they also involve skill, although not
23 as much as poker. Still they are actually very good gambles
24 because the hourly rate that you'll lose at is very small. There
25 are two things which determine the payback percentage of a poker
26 machine. One is the skill of the player and the other is the
27 odds that the machine pays. There are many machines in Las Vegas

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1 that pay back over 100 percent against the skillful player, a
2 tiny bit over 100 percent.

3 And it is not that hard to learn how to play them
4 that well. Of course, casinos are aware of the laziness of the
5 vast majority of their customers, that is why they can offer
6 black jack and liberal poker machines. They know people will
7 play very quickly. They count on it. As far as hourly loss is
8 concerned, a typical poker machine player will lose less than
9 \$10.00 an hour. As far as deception is concerned, there is none.
10 The computer deals the cards in exactly the same proportion as
11 they would be dealt using a real deck. In other words the queen
12 of hearts will show up once out of 52 times in any particular
13 position. Furthermore the payoffs are posted for all to see.
14 Thus, any mathematician upon reading the pay table can very
15 quickly calculate the pay-back for any machine assuming optimal
16 play.

17 He needs no further information about the workings of
18 the machine. This is not so with many slot machines. I am not
19 thrilled with slot machines. Though may pay back as much as 98
20 percent this is not the whole story. Ninety-eight percent still
21 costs you \$54.00 an hour on a \$1.00 machine. And there are many
22 machines that are 90 percent. Ninety sounds like 98 but it's
23 actually five times as bad. It costs you \$270.00 an hour.

24 Furthermore, the symbols do not come up on some
25 machines as often as they appear to. They come up much, much,
26 much less in order to allow for greater jackpots. I suggest
27 there be some sign that indicates that. I'm having to cut this
28 short but I want to say about sports betting, a person who bets

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1 \$110.00 to win 100 on a sports bet is costing himself \$67.00 an
2 hour. So I think that's actually one of the more innocuous
3 gambles. Thank you.

4 CHAIRPERSON JAMES: Thank you. I think we should
5 have had this briefing on our first day in Las Vegas.

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